

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An DC/AC converter for supplying two gas discharge lamps, comprising:

[[ - ]] a pair of input terminals for supplying a DC voltage;

[[ - ]] a first series circuit interconnecting the input terminals, comprising a first switching element and a second switching element;

[[ - ]] a second series circuit interconnecting the input terminals, comprising a third switching element and a fourth switching element;

[[ - ]] a third series circuit interconnecting the input terminals, comprising ~~a first capacitor and a second capacitor~~ two capacitors with substantially equal capacitance;

[[ - ]] a first gas discharge lamp connected between ~~the~~ a

junction between the first and the second ~~switch element~~ switching elements and the junction between the two capacitors;

[[ - ]] a second gas discharge lamp connected between the junction between the third and the fourth ~~switch element~~ switching elements and the junction between the two capacitors;

[[ - ]] wherein an inductor is connected in series with each of the lamps; and

[[ - ]] control circuit for controlling the first to fourth ~~switch~~ switching elements, and which is adapted to avoid the simultaneously conducting of the first and second ~~switch~~ switching elements, the third and the fourth ~~switch~~ switching elements respectively,

~~characterized in that~~ wherein the control element circuit is adapted to control ~~the~~ conducting periods of the switches with a duty cycle which is variable,

wherein a series circuit of a further inductor and a diode is connected between one of the input terminals and the first switching element, and wherein a fifth switching element is connected between a junction of the diode and the further inductor and another of the input terminals, the fifth switching elements

being controlled by the control circuit.

2. (Currently Amended) The DC/AC converter as claimed in claim 1, characterized in that wherein the control unit circuit is adapted to control the duty cycle of the first and second switch switching elements simultaneously and to control the duty cycle of the third and fourth switch switching elements simultaneously.

3. (Currently Amended) The DC/AC converter as claimed in claim 1, characterized in that wherein the control unit circuit is adapted to control the switch switching elements with a frequency in the band between 140 Hz and 170 Hz.

Claim 4 (Canceled)

5. (Currently Amended) The DC/AC converter as claimed in claim 4, characterized in that the claim 1, wherein a frequency of the switching of the fifth switch switching element is at least an order of magnitude higher than the a switching frequency of the first to fourth switching elements.

6. (New) A converter for supplying two lamps, comprising:

a first input terminal and a second input terminal for supplying a voltage;

switching elements interconnecting the first input terminal and the second input terminal;

two capacitors interconnecting the first input terminal and the second input terminal;

a first lamp connected between a junction between first and second switches of the switching elements and a junction between the two capacitors;

a second lamp connected between a junction between third and fourth switches of the switching elements and the junction between the two capacitors; and

a controller adapted to control the switching elements;

wherein a series circuit of an inductor and a diode is connected between the first input terminal and the first switch, and wherein a fifth switch is connected between a junction of the diode and the inductor and the second input terminal, the fifth switch being controlled by the controller.

7.(New) The converter of claim 6, wherein the two capacitors have substantially equal capacitance.

8.(New) The converter of claim 6, further comprising an additional inductor connected in series with the first lamp, and a further inductor connected in series with the second lamp.

9.(New) The converter of claim 6, wherein the controller is further adapted to avoid simultaneously conduction of the first and second switches, and to avoid simultaneously conduction of the third and the fourth switches.

10.(New) The converter of claim 6, wherein the controller is further adapted to control conducting periods of the switching elements with a duty cycle which is variable.

11.(New) The converter of claim 6, wherein the controller is further adapted to control a duty cycle of the first and second switches simultaneously, and to control a duty cycle of the third

and fourth switches simultaneously.

12.(New) The converter of claim 6, wherein the controller is further adapted to control the switching elements with a frequency between 140 Hz and 170 Hz.

13.(New) The converter of claim 6, wherein a frequency of switching of the fifth switch is at least an order of magnitude higher than a switching frequency of the first to fourth switches.